If the ultrasonic pattern is that of a solid or is indeterminate, selective renal angiography is performed to define the lesion, its arterial supply, and venous drainage.

By employing the ultrasonic scan, a large number of renal arteriograms can thus be avoided with no loss in diagnostic accuracy.

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The Role of Lymphangiography in Ovarian, Cervical, Endometrial and Prostatic Cancer

Terry et al, have pointed out the value of lymphangiography in the initial staging of patients with carcinoma of the uterine cervix. The lymphangiograms were positive in 25 percent of Stage II-B, in 48 percent of Stage III-A, and in 75 percent of Stage III-B. In Stage III cervical disease, the para-aortic lymph nodes were positive in 17 percent of cases. The study is very valuable in determining how extensive the radiation therapy should be and also helpful in discovering recurrent disease.

Hendricksen, Beck, and Latour have made studies of patients who have died from endometrial carcinoma. They found a high percentage of metastases to the para-aortic lymph nodes at autopsy and that a significant number of patients had para-aortic lymph node involvement with negative pelvic lymph nodes.

In a series, studied by Hanks and Bagshaw, of patients with ovarian carcinoma who had lymphangiography, the staging and the treatment planning was changed on the basis of the results from this examination. In seven of twenty-two selected patients, the para-aortic lymph nodes were involved.

Very little emphasis has been placed on the involvement of the lymph nodes from prostatic carcinoma. Since many patients with locally advanced prostatic carcinoma are now being irradiated with "curative" tumor doses, it is important to know the extent of the disease in order to adequately plan the treatment portals.

If the extent of the disease is not known, then it cannot be adequately treated. Too often patients have been subjected to extensive surgical or radiation therapy, or both, without the true extent of the disease being known. If the paraaortic lymph nodes are involved, then the usual plan for radiation therapy will have to be modified and also extensive radical operation for recurrent or persistent disease may not be feasible.

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Non-Operative Retained Biliary Tract Stone Extraction

Retained, overlooked, or forgotten stones present a common problem in operations on the biliary tract. If duct stones are discovered on post-operative T-tube cholangiography, a second surgical procedure is usually required. This reintervention, with its higher morbidity and mortality than the original surgical procedure, can be avoided by the use of a new roentgenologic technique—non-operative retained biliary tract stone extraction through T-tube tract.

The T-tube is left in place for about five weeks after operation in order to form a fibrous tract. After its removal, a flexible catheter is then introduced into the duct system through the T-tube tract. Ureteral stone baskets, wire slings, or extraction forceps manipulated through the catheter are utilized for stone extraction.

During the past year we applied this ambulatory procedure in 16 patients with retained biliary tract stones. The procedure was unsuccessful in one case. Stones were extracted in the others, and all 15 patients were asymptomatic after stone removal in three to nine months of follow-up.

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